



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,898	11/08/2000	Roni Even	ACC3(6544.107870)	3103
29855	7590	06/23/2005	EXAMINER	
WONG, CABELLO, LUTSCH, RUTHERFORD & BRUCCULERI, P.C. 20333 SH 249 SUITE 600 HOUSTON, TX 77070			WON, MICHAEL YOUNG	
			ART UNIT	PAPER NUMBER
			2155	
DATE MAILED: 06/23/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/708,898

Applicant(s)

EVEN ET AL.

Examiner

Michael Y. Won

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 49-64 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-24 and 49-64 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 13-16 have been amended.
2. Claims 1-24 and 49-64 have been examined and are pending with this action.

***Allowable Subject Matter***

3. The indicated allowability of claims 1-12, 24, 49-57, and 59-64 is withdrawn in view of the newly discovered reference(s) to Catanzaro et al. (US 6,438,111 B1). Rejections based on the newly cited reference(s) follow.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 13-17, 19, 21-24, and 58-64 are rejected under 35 U.S.C. 102(e) as being anticipated by Catanzaro et al. (US 6,438,111 B1).

**INDEPENDENT:**

As per **claim 13**, Catanzaro teaches a system for establishing a multimedia communication between a plurality of multimedia terminals using a plurality of multipoint control units in communication with the plurality of multimedia terminals (see Fig.1 and col.1, line 59-col.2, line 5), the system comprising: a virtual multipoint control unit (see Fig.2, #105 and col.3, lines 24-25: "router 105") communicatively interconnected to the plurality of multipoint control units (see col.1, lines 26-32: "multipoint server") and controlling participant slots of the multipoint control units (see Fig.2 and col.1, lines 36-43), wherein the virtual multipoint control unit is configured to interconnect the plurality of multimedia terminals in the multimedia communication via the participant slots of the at least two of the plurality of multipoint control units (see col.4, lines 33-47 and line 52-col.5, line 11).

As per **claim 24**, Catanzaro teaches a system for multimedia communication, comprising: a plurality of multimedia terminals (inherent: see Fig.1 and col.1, lines 26-28); a plurality of multipoint control units in communication with the plurality of multimedia terminals (see Fig.1 and Fig.2); and a virtual control unit communicatively interconnected to the plurality of corresponding multipoint control units for controlling the plurality of multipoint control units from a single location (see col.3, lines 24-25), wherein the virtual multipoint control unit is one of the plurality of multipoint control units (implicit: see col.6, lines 38-41 & lines 41-44).

**DEPENDENT:**

As per **claims 14 and 59**, Catanzaro further teaches wherein the multimedia terminals comprises at least one H.320 terminal, at least one H.323 terminal, or at least one H.321 terminal (see col.2, lines 47-51).

As per **claim 15**, Catanzaro teaches wherein the virtual multipoint control unit is configured to: determine available participant slots on each of the multipoint control units (see col.4, TABLE ONE & lines 33-35); and interconnect the multimedia terminals of the multimedia communication via the available participant slots of the at least two of the multipoint control units, if the multimedia communication has a number of terminals that exceeds a number of the available participant slots on each of the multipoint control units (see col.1, lines 36-53; col.1, line 63-col.2, line 5; and col.4, lines 39-47).

As per **claim 16**, Catanzaro further teaches wherein the virtual multipoint control unit is further configured to: interconnect the multimedia terminals of two or more multimedia communications via available participant slots of the one of the multipoint

Art Unit: 2155

control units, if the two or more multimedia communications have a number of terminals that is less than or equal to a number of the available participant slots of the one multipoint control unit (see col.4, lines 40-56 and col.6, lines 24-32).

As per **claims 17 and 60**, Catanzaro further teaches wherein the multimedia terminals include a combination of H.320, H.321, and H.323 systems (see col.1, lines 14-25 and col.3, lines 19-23).

As per **claims 19 and 61**, Catanzaro further teaches wherein the multimedia terminals can communicate over a LAN/Internet network (see col.1, lines 20-24).

As per **claims 21 and 62**, Catanzaro further teaches wherein the virtual multipoint control unit is capable of communicating with terminals of various standards (see col.2, lines 47-51).

As per **claims 22 and 63**, Catanzaro further teaches wherein the terminals are compatible with the H.320, H.321, and H.323 standards (see claim 17 rejection above).

As per **claims 23 and 64**, Catanzaro further teaches wherein the virtual multipoint control unit in communication with the at least two multipoint control units is capable of scheduling and hosting a video conference (see col.2, lines 47-51) including terminals connected to at least two of the at least two multipoint control units (see Fig.1 and Fig.2).

As per **claim 58**, Catanzaro further teaches wherein the virtual multipoint control unit is one of the plurality of multipoint control units (implicit: see col.6, lines 38-41 & lines 41-44)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-12, and 49-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al. (US 6,006,253 A) in view of Catanzaro et al. (US 6,438,111 B1).

**INDEPENDENT:**

As per **claims 1 and 9**, Kumar teaches a method for multimedia communication, comprising the steps of: identifying capability factors for each of the plurality of multimedia terminals and each of the plurality of corresponding multipoint control units (see col.1, lines 23-29: H.232 requirement); responsive to a command to initiate a multimedia communication between at least two of the plurality of multimedia terminals, evaluating the capability factors for each of the at least two multimedia terminals (see col.1, lines 23-29: H.232 requirement: "capability negotiation"); and comparing the capability factors for each of the at least two multimedia terminals to the capability factors of the multipoint control units communicatively interconnected to the central controller to determine a preferred interconnection between the at least two multimedia terminals (see col.5, lines 63-66).

Kumar does not explicitly teach of communicatively interconnecting a plurality of multipoint control units a central controller; responsive to the comparing of capability factors, the central controller directing a communicative interconnection between the at least two multimedia terminals via at least two of the plurality of multipoint control units; *and controlling multipoint control unit participant slots with the central controller, wherein the central controller controls the multipoint control unit participant slots as if it were an additional slot (as recited in claim 9).* Catanzaro teaches of a central controller communicatively interconnecting the plurality of corresponding multipoint control units (see Fig.2 and col.3, lines 24-25); responsive to the comparing of capability factors (taught by Kumar), the central controller directing a communicative interconnection between the at least two multimedia terminals via at least two of the plurality of multipoint control units (see Fig.2; Fig.4; and col.4, line 52-col.5, line11); *and controlling multipoint control unit participant slots with the central controller, wherein the central controller controls the multipoint control unit participant slots as if it were an additional slot (see col.4, lines 21-23 & 33-47).*

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Catanzaro within the system of Kumar by implementing a central controller communicatively interconnecting a plurality of multipoint control units to a central controller and directing a communicative interconnection between the at least two multimedia terminals via at least two of the plurality of multipoint control units, *for controlling multipoint control unit participant slots as if it were additional slots* within the multimedia communication method because



Catanzaro teaches that the number of conferees that a MCU can support is limited and fixed (see col.1, lines 36-48), and once the limit is reached additional MCU, without adding additional MCU's performance is degraded or additional conferee's are restricted (see col.1, lines 49-53). Therefore, by employing the teachings of Catanzaro and implementing additional MCU's, performance can be unaffected and additional conferees can transparently join the conference(s) as if additional slots were unlimited (see col.6, lines 38-41).

**DEPENDENT:**

As per **claims 2 and 49**, Kumar further teaches wherein the capability factors include identification factors (see col.4, lines 63-65), matching factors (see col.6, lines 1-7), and routing factors (implicit: see col.3, lines 40-43).

As per **claims 3 and 50**, Kumar does not explicitly teach wherein the identification factors include information relating to the identity, needs, requirements, and participation authority of the plurality of multimedia terminals. Catanzaro teaches wherein the identification factors include information relating to the identity, needs, requirements, and participation authority of the plurality of multimedia terminals (see col.4, lines 40-51). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Catanzaro within the system of Kumar by implementing an identification factor including a plurality of information within the multimedia communication method because Catanzaro teaches that the identification can be used to specify selections of additional MCU's such a

selecting MCU's that are within close proximity of the user (see above reference location provided).

As per **claims 4 and 51**, Kumar does not explicitly teach wherein the matching factors include information relating to the capacity and technological orientation. Catanzaro teaches wherein the matching factors include information relating to the capacity and technological orientation (see col.4, lines 33-39). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Catanzaro within the system of Kumar by implementing a matching factor including a plurality of information within the multimedia communication method because Catanzaro teaches that as demand for traffic increases, to maintain performance without degradation, it is desirable to increase capacity (see col.1, lines 49-57).

As per **claims 5 and 52**, Kumar does not teach wherein the routing factors include information relating to the most expeditious route for effecting the communicative interconnection between the at least two multimedia terminals and the corresponding multipoint control units. Catanzaro teaches of wherein the routing factors include information relating to the most expeditious route for effecting the communicative interconnection between the at least two multimedia terminals and the corresponding multipoint control units (implicit: see col.4, lines 44-47). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Catanzaro within the system of Kumar by implementing a routing factor including a plurality of information relating to the most expeditious route

Art Unit: 2155

within the multimedia communication method because Catanzaro teaches of optimizing performance.

As per **claims 6 and 53**, Kumar teaches of further comprising: allocating conferences on multipoint control units such that the number of conferences that can be scheduled on a conference schedule is optimized (see col.9, lines 60-65).

As per **claims 7 and 54**, Kumar further teaches wherein the conference schedule is optimized by combining conferences on a multipoint control unit so as to maximize the number of participants on the multipoint control unit (see col.9, lines 60-65: "sufficient resources").

As per **claim 8**, Kumar teaches of further comprising: controlling multipoint control unit participant slots with the virtual multipoint control unit (see claim 1 rejection above and col.5, lines 60-64).

As per **claims 10 and 55**, Kumar further teaches wherein the multipoint control unit participant slots are participant slots remaining after the multipoint control unit is optimally scheduled (inherent).

As per **claims 11 and 56**, Kumar further teaches wherein the command to initiate a multimedia communication is issued when the start time for a conference arrives (see col.4, line 66 to col.5, line 18).

As per **claims 12 and 57**, Kumar further teaches wherein the command to initiate a multimedia communication is issued when a participant requests an impromptu multimedia communication (see col.4, line 66 to col.5, line 18).

6. Claims 1-12, and 49-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Catanzaro et al. (US 6,438,111 B1) in view of Kumar et al. (US 6,006,253 A).

As per **claim 18**, Catanzaro does not explicitly teach wherein the multimedia terminals can communicate over an ATM network. Kumar teaches wherein the multimedia terminals can communicate over an ATM network (see Fig.1, #160 and col.3, lines 31-39). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Kumar within the system of Catanzaro by implementing communicating over an ATM network within the system for establishing a multimedia communication between a plurality of multimedia terminals because Catanzaro teaches that the "inventive concept is applicable to other types of networks as well" (see col.2, lines 61-65).

As per **claim 20**, Catanzaro does not explicitly teach wherein the multimedia terminals can communicate over an ISDN network. Kumar teaches wherein the multimedia terminals can communicate over an ISDN network (see Fig.1, #150 and col.3, lines 31-39). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Kumar within the system of Catanzaro by implementing communicating over an ISDN network within the system for establishing a multimedia communication between a plurality of multimedia terminals because Catanzaro teaches that the "inventive concept is applicable to other types of networks as well" (see col.2, lines 61-65).

***Response to Arguments***

7. Applicant's arguments with respect to claims 13-23 have been considered but are moot in view of the new ground(s) of rejection. The rejection above is based on a newly cited reference *Catanzaro et al.* (US 6,438,111 B1).

*Catanzaro* clearly teaches of a router 105 (i.e. virtual multipoint control unit) that employs a table (see col.4, TABLE ONE) comprising a list of servers (see col.1, lines 26-32: MCU's) to determine when a user or conferee attempts to join the conference (see col.4, lines 21-22), whether additional MCU's are necessary (see col.4, lines 33-35 & 39-47) thereby, controlling participant slots (see col.1, line 36-38) of **all** ("at least two") multipoint control units (see col.1, line 54-col.2, line 5 and col.4, lines 52-59).

For the reasons above, claims 13-23 have been rejected. Similarly, for the reasons above, the indicated allowability of claims 1-12, 24, 49-57, and 59-64 is withdrawn.

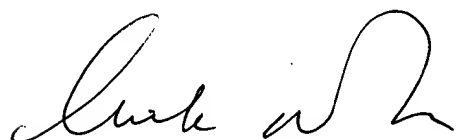
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Y. Won whose telephone number is 571-272-3993. The examiner can normally be reached on M-Th: 7AM-5PM.

Art Unit: 2155


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Won



June 21, 2005



SALEH NAJJAR  
PRIMARY EXAMINER